



## **Producing diastereomers of 4-hydroxyproline using 4-hp epimerase from *Serratia marcescens* or *Acinetobacter baumannii***

**Description of Technology:** This invention is in the field of biocatalysis. More specifically, this invention pertains to the discovery of novel 4-hydroxyproline epimerases and to their use to convert either trans-4-hydroxy-L-proline or cis-4-hydroxy-D-proline to a mixture of trans-4-hydroxy-L-proline and cis-4-hydroxy-D-proline.

### **Patent Listing:**

1. **US Patent No.** 6,204,050, Issued on February 1, 2000, “Producing diastereomers of 4-hydroxyproline using 4-hp epimerase from *Serratia marcescens* or *Acinetobacter baumannii*”

<http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetacgi%2FPTO%2Fsearch-bool.html&r=1&f=G&l=50&co1=AND&cd=PTXT&s1=6,204,050.PN.&OS=PN/6,204,050&RS=PN/6,204,050>

**Market Potential:** The agricultural and pharmaceutical industry seeks production of compounds in high yield, and when a compound contains one or more chiral centers, it is often desirable to produce a single isomer. The products of the present invention are useful as precursors for chemicals of high value in these industries. Specifically, cis-4-hydroxy-D-proline (CHDP) and trans-4-hydroxy-L-proline (THLP) are useful for preparing agrochemicals and pharmaceuticals.

Although these sources of 4-hydroxyproline epimerase are known, a novel and enhanced source for this biocatalyst would be useful to industry in the production of high value agrochemicals and pharmaceuticals.

### **Benefits:**

- Enhanced source of 4-hydroxyproline epimerase

### **Applications:**

- Agricultural and pharmaceutical products

### **Contact:**

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